



# TRAFFIC IMPACT ASSESSMENT

**PROPOSED DEVELOPMENT PLAN**

TRARALGON-MAFFRA ROAD, TRARALGON NORTH

8 APRIL 2025

## TRARALGON-MAFFRA ROAD, TRARALGON NORTH

CLIENT: Millar Merrigan

OBT JOB NUMBER: 24970



Suite 2.03, 789 Toorak Road  
Hawthorn East, Victoria 3123

**T:** 61 3 9804 3610  
**W:** obrientraffic.com  
ABN 55 007 006 037

**STUDY TEAM**



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# 1 INTRODUCTION

O'Brien Traffic has been engaged by Millar Merrigan to undertake a traffic impact assessment of a proposed development plan for land adjacent to Traralgon-Maffra Road and Baldwin Road, Traralgon North. This land was rezoned from Farming Zone (Schedule 1) to General Residential (Schedule 3) in June 2023.

In the course of preparing this report:

- The Baldwin Road Development Plan prepared by Millar Merrigan has been reviewed (Plan 25950 DP1\_V2, dated February 2025 – **Appendix A**);
- The Traralgon North Development Plan, dated November 2015 has been reviewed;
- The addendum to the Traralgon North Development Plan, approved 19/2/2020 has been reviewed;
- The Infrastructure Design Manual (Version 5.40) has been reviewed;
- The subject site and surrounding area have been inspected; and
- The traffic implications of the proposal have been assessed.

## 2 EXISTING CONDITIONS

### 2.1 LOCATION AND LAND USE

The subject site is located on the western side of Traralgon-Maffra Road, north of Baldwin Road. The site is zoned General Residential under the Latrobe City Planning Scheme. It is irregular in shape in shape with a frontage of approximately 800 metres to Traralgon-Maffra Road and comprises an area of approximately 65 hectares. The site is generally undeveloped.

The site comprises a number of lots, which are:

- Parcel H\PS826075 (southern portion);
- 50 Baldwin Road (southern portion);
- 110 Marshalls Road (northern portion); and
- 118 Marshalls Road (northern portion).

A locality plan showing the approximate location of the subject site (approximate boundaries only) and the surrounding area is provided in **Figure 1**, and a recent aerial photo of the same area is provided in **Figure 2**.

The development plan prepared by NBA Group and Millar Merrigan (Plan No. 25950 DP1 V2 dated February 2025) is shown in **Figure 3** and is also provided in **Appendix A**.

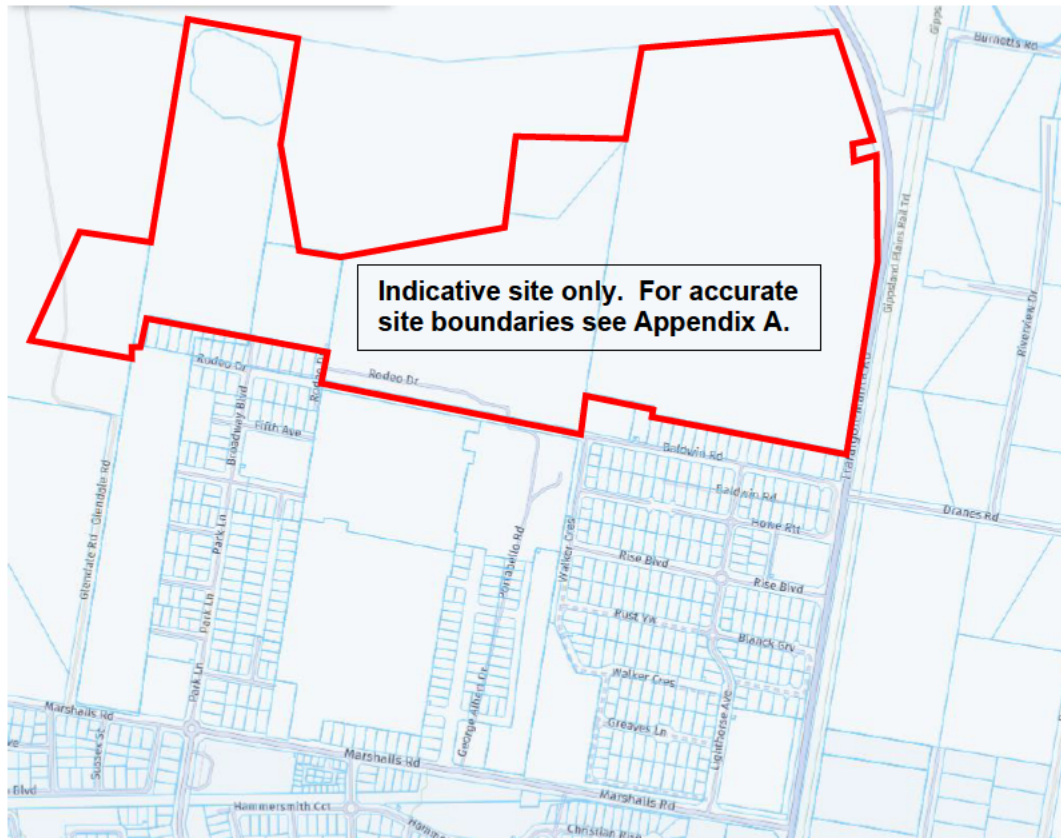
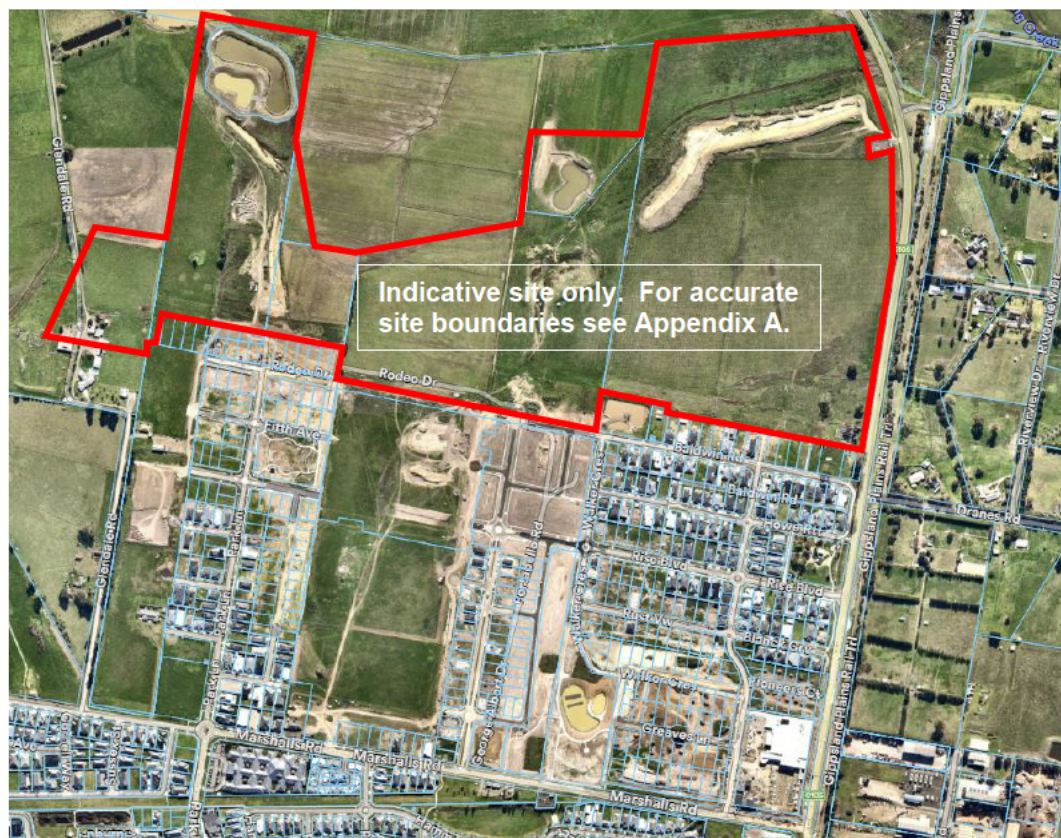


FIGURE 1: LOCALITY PLAN



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FIGURE 2: AERIAL PHOTO OF SUBJECT SITE AND SURROUNDING AREA - PHOTO DATED MAY 2024

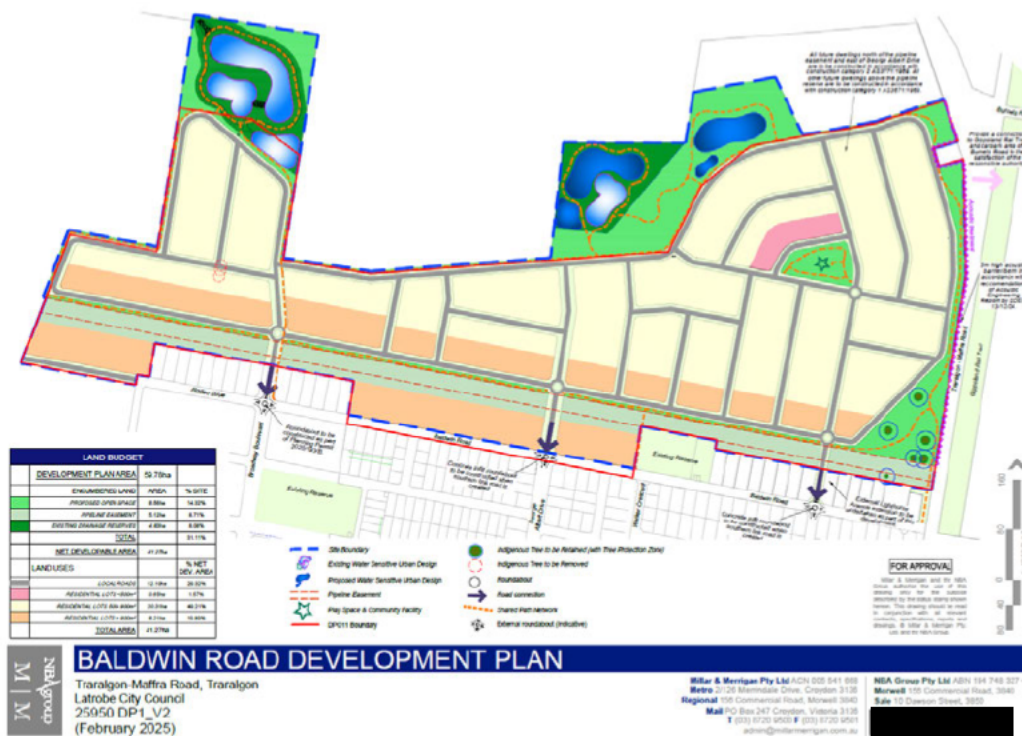


FIGURE 3: BALDWIN ROAD DEVELOPMENT PLAN

## 2.2 SURROUNDING LAND USE

The subject site is located in an area that is generally farming to the north, east and west. There is some rural living on the eastern side of Traralgon-Maffra Road, directly opposite the site frontage, and further residential development is planned in this area. The land to the south is currently being redeveloped into a residential area as part of the Traralgon North Development Plan.

## 2.3 ROAD NETWORK

**Traralgon-Maffra Road** is an arterial road (Transport Zone Category 2) under the control and management of Department of Transport. It runs in a north-south orientation. In the vicinity of the subject site, Traralgon-Maffra Road has a road reserve of approximately 20 metres and a pavement width of approximately 12 metres providing one traffic lane (3.8 metres wide) and a sealed shoulder (between 2 and 2.5 metres wide) in each direction.

The posted speed limit on Traralgon-Maffra Road changes along the site frontage. A posted speed limit of 80 km/h applies from the southern boundary of the site for a distance of approximately 250 metres. North of this point, the posted speed limit increases to 100 km/h.

Views of Traralgon-Maffra Road in the vicinity of the subject site are shown in **Figure 4** and **Figure 5**.



FIGURE 4: TRARALGON-MAFFRA ROAD FACING NORTH (SUBJECT SITE ON LEFT)



FIGURE 5: TRARALGON-MAFFRA ROAD FACING SOUTH (SUBJECT SITE ON RIGHT)

## 2.4 EXISTING TRAFFIC VOLUMES

Department of Transport & Planning (DTP) open data from 2020 indicates that Traralgon-Maffra Road in the vicinity of the subject site carries traffic volumes of 5,100 vehicles per day with a split of 2,600 northbound and 2,500 southbound.

Data collected by Council over a 13-day period from the 7<sup>th</sup> to the 21<sup>st</sup> of August 2015 on Marshalls Road, approximately 200 metres west of Traralgon-Maffra Road, recorded a weekday AADT of 973 vehicles per day, with approximately half recorded in each direction. The AM peak (fewer than 90 vehicles in the peak hour) was generally between 8am and 9am, and the PM peak (in the order of 100 vehicles in the peak hour) was generally between 5pm and 6pm. Given that a limited amount of development has occurred in the area since 2015 it is expected that the 2015 data will still be valid.

## 2.5 CASUALTY CRASH HISTORY

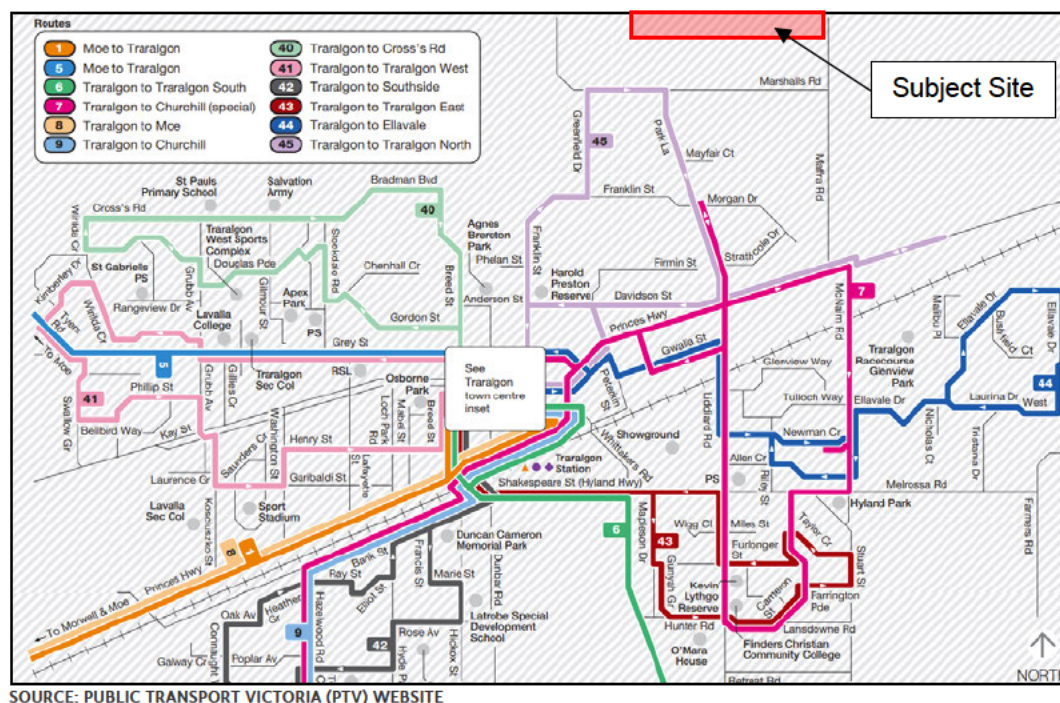
A review of the casualty crash history in the last five years of available data (2019-2024) indicated that there were no crashes at any of the intersections along Traralgon-Maffra Road that would provide access to the subject site.

## 2.6 PUBLIC TRANSPORT

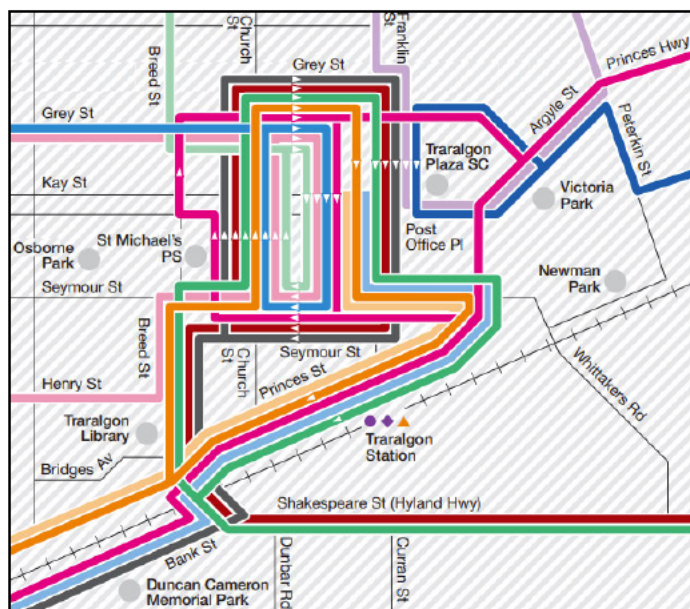
Traralgon Train Station is located approximately 4 km south-west of the subject site.

Bus Route 45 (Traralgon to Traralgon North) runs north along Park Lane and turns left at the intersection of Marshalls Road to the south-west of the subject site. The nearest bus stop is located approximately 500 metres walk from the subject site's nearest connection to Marshalls Road.

The public transport services within Traralgon are shown in **Figure 6** and **Figure 7**.



**FIGURE 6: PUBLIC TRANSPORT SERVICES - GREATER TRARALGON**



SOURCE: PUBLIC TRANSPORT VICTORIA (PTV) WEBSITE

FIGURE 7: PUBLIC TRANSPORT SERVICES – TOWN CENTRE

### 3 THE PROPOSAL

The Baldwins Road Development Plan has been prepared in accordance with Schedule 11 of the Development Plan Overlay. The Development Plan will provide for the future subdivision of the subject land into typical residential allotments. Initial concepts suggest the site could accommodate 457 lots ranging from smaller lots below 500m<sup>2</sup> to larger lots greater than 900m<sup>2</sup>. The proposed development plan is provided in **Figure 3** and **Appendix A**.

Vehicle access is proposed to be from the adjacent subdivisions to the south (i.e. the area covered by the Traralgon North Development Plan) via three north-south roads connecting to either Rise Boulevard or Marshalls Road (see **Figure 1**).

It is noted that the western-most of the three proposed north-south roads will connect to Broadway Boulevard, which continues into Park Lane south of Marshalls Road.

The intersection of Marshalls Road and Traralgon-Maffra Road is to be signalised as part of a future DCP project, and Marshalls Road will be upgraded, as discussed in **Section 4**.

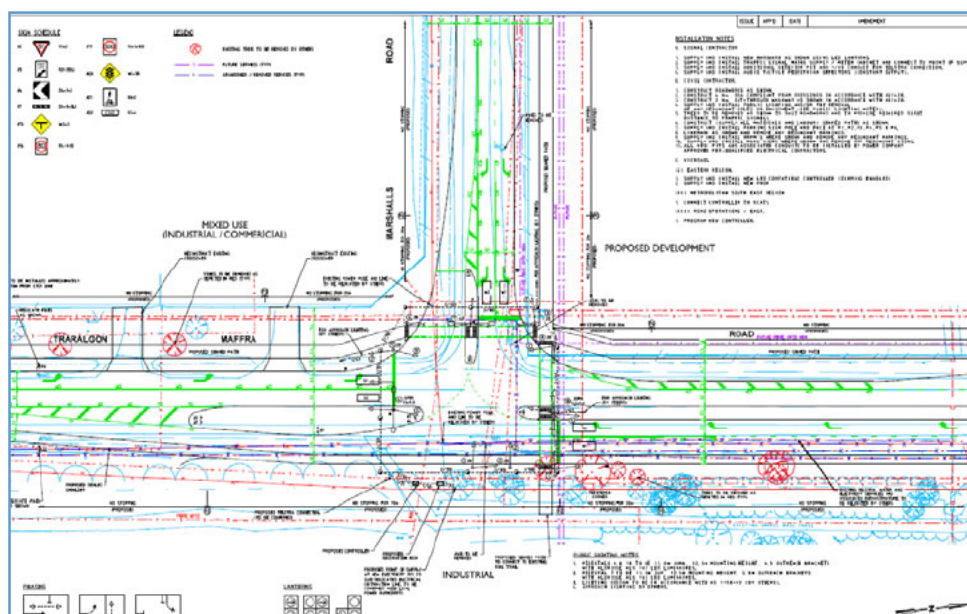
## 4 PROPOSED FUTURE ROADWORKS

### 4.1 MARSHALLS ROAD AND TRARALGON-MAFFRA ROAD INTERSECTION

The intersection of Marshalls Road and Traralgon-Maffra Road is to be upgraded with traffic signals.

Work on the design of this intersection was undertaken for Council by GTA in 2016,

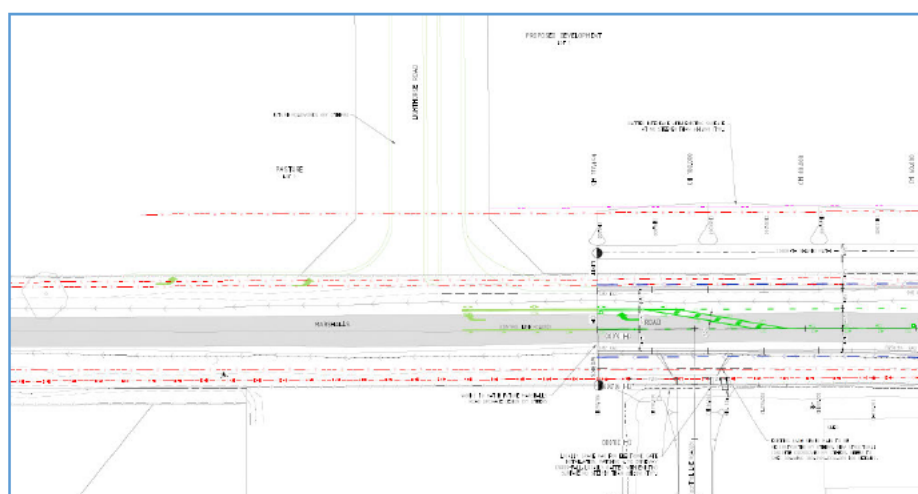
with the current design shown in **Figure 8**. Right and left turn approach lanes are provided on Marshalls Road. Widening of Traralgon-Maffra Road to provide turn lanes at the Marshalls Road intersection is underway. Council's website states that construction is to be completed by August 2024. While this is unlikely, a date in late 2024 is realistic.



**FIGURE 8: TRAFFIC SIGNAL PLAN**

## 4.2 MARSHALLS ROAD UPGRADE

Marshalls Road is to be upgraded west of Traralgon-Maffra Road, including provision of right and left turn lanes at Lighthorse Avenue, as shown in **Figure 9**. The left turn lane has recently been constructed. A roundabout has been constructed at the intersection of Marshalls Road and Park Lane.



**FIGURE 9: MARSHALLS ROAD INTERSECTION WITH LIGHTHORSE AVENUE**

## 4.3 OTHER ROADWORKS

A range of other roadworks in the area surrounding the subject site, including roundabouts and intersection upgrades, are included in the Addendum to the Traralgon North Development Plan.

## 5 TRAFFIC GENERATION, DISTRIBUTION AND IMPACT

### 5.1 TRAFFIC GENERATION

The development will ultimately include 457 residential lots.

It is anticipated that the subdivision will generate up to 10 daily vehicle trips per lot, with 10% of these trips occurring in each of the AM and PM peak hours. At full occupancy, this equates to a total of 4,570 trips per day and up to 457 trips in each of the peak hours. This includes trips into and out of the site.

Given that there will ultimately be three north-south connection roads between the subject site and Marshalls Road, equally spaced along the southern boundary of the site, it is anticipated that at full build-out each of the three north-south connector road would carry one third of the total trips generated by the site (i.e. approximately 1,520 trips per day – with approximately 150 trips per peak hour on each of the three roads including trips into and out of the site).

### 5.2 TRAFFIC DISTRIBUTION

To determine peak hour traffic volumes, the typical residential splits between entry and exit movements have been adopted, which are:

- AM peak hour: 20% IN and 80% OUT; and
- PM peak hour: 60% IN and 40% OUT.

Based on the location of the subject site in relation to the Traralgon town centre and the surrounding towns in general, the following distribution assumptions have been made:

- One third (33%) of the trips generated by the site will use the eastern access road (which continues as Lighthouse Avenue), 33% will use the central access road (which continues as Portabello Road/George Albert Drive) and 33% will use the western access road (which continues as Broadway Boulevard/Park Lane);
- All trips using the western and central access roads and 50% of trips using the eastern access road will be to and from Marshalls Road;
- The other 50% of trips using the eastern access road will use Rise Boulevard;
- 5% of trips will be to/from the north (i.e. towards Glengarry);
- 30% of trips will use Park Lane south of Marshalls Road;
- 65% of trips will use Traralgon-Maffra Road to travel to and from the south.

Based on the above, the anticipated AM and PM peak hour traffic generation to/from the proposed subdivision is shown in **Figure 10**, and the distribution of this traffic is shown in **Figure 11**.

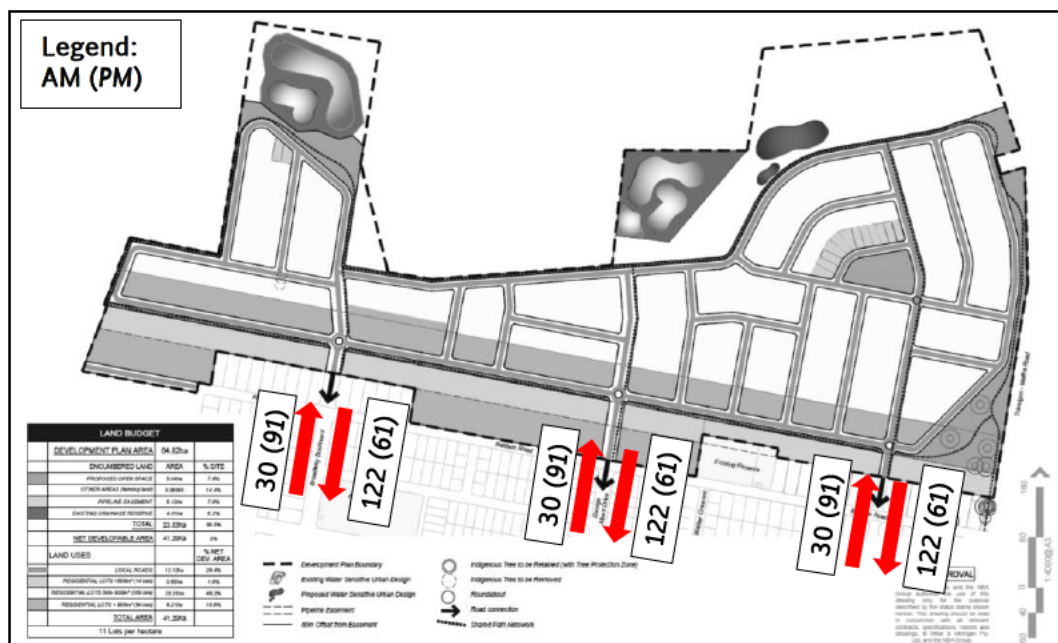


FIGURE 10: ANTICIPATED TRAFFIC VOLUMES (AM AND PM PEAK HOURS)

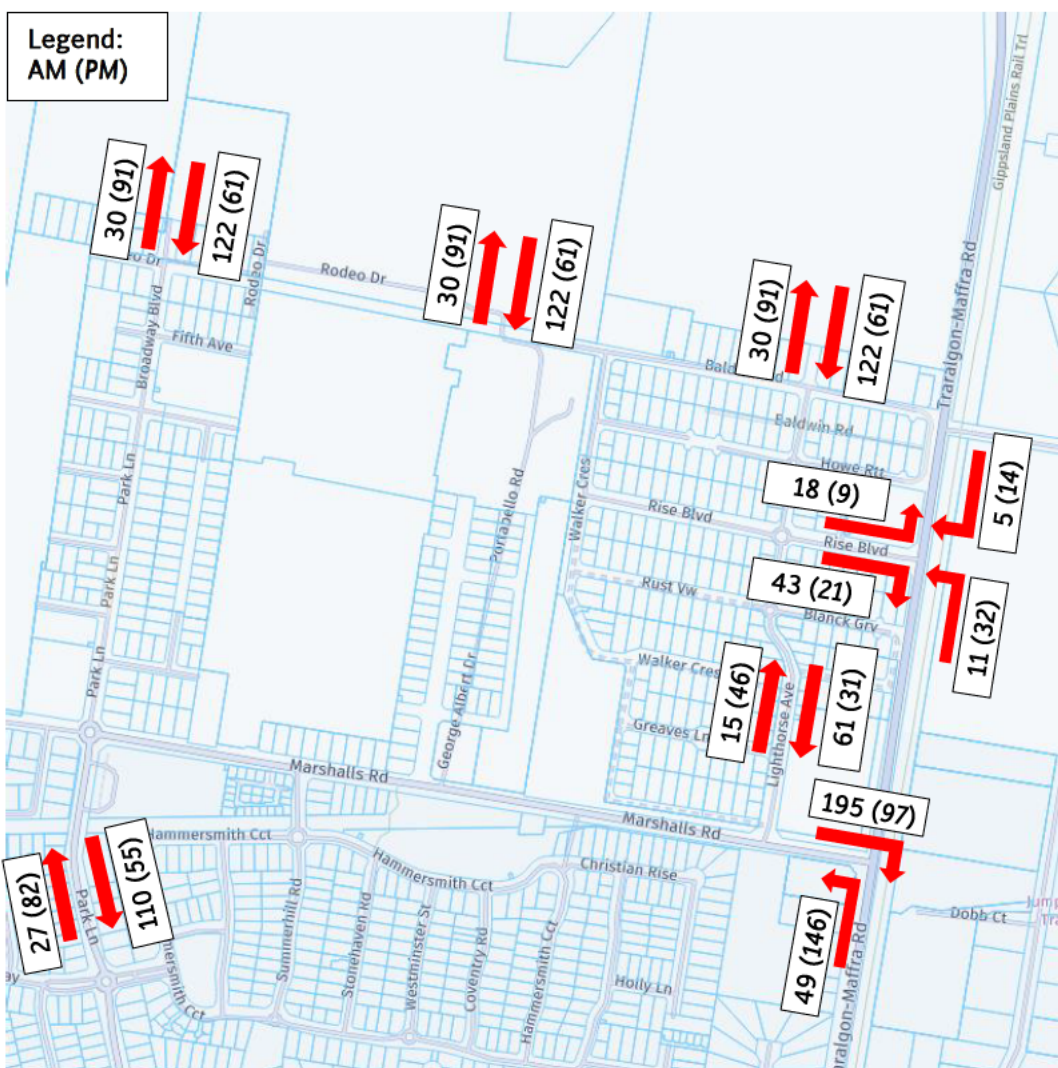
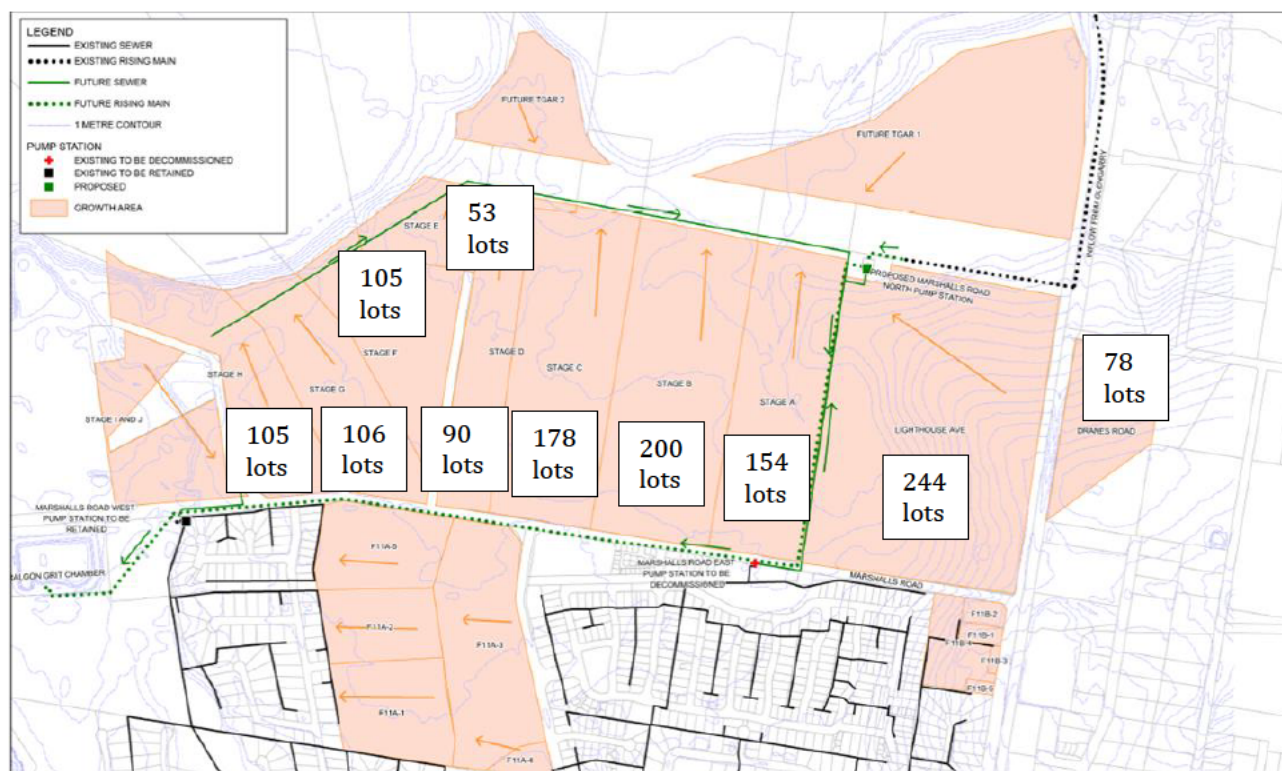


FIGURE 11: DISTRIBUTION OF TRAFFIC (AM AND PM PEAK HOURS)

## 5.3 TRAFFIC DISTRIBUTION – OTHER SITES

Information in relation to the development of land between the subject site and Marshalls Road is provided in **Figure 12**.

**Figure 12** shows that a total of 1,235 lots are proposed to be developed on the land north of Marshalls Road and south of the subject site.



**FIGURE 12: ESTIMATED LOTS**

These lots will generate in the order of 12,000 trips per day (in both directions), with 1,200 trips generated each peak hour. It is likely that almost all of these trips will move southwards to Marshalls Road.

Adding this to the 4,570 trips generated by the subject site and conservatively assuming that all of this traffic uses Marshalls Road, this totals 16,570 trips per day on Marshalls Road, with approximately 1,660 each peak hour. Half of this traffic (i.e. 8,285 trips) will be in each direction along Marshalls Road across the day. This is a worst-case scenario assessment. In reality, a proportion of this traffic will use Park Lane, or will use Rise Boulevard, and will not need to use the intersection of Marshalls Road and Traralgon-Maffra Road.

It is assumed that the signalisation of Marshalls Road and Traralgon-Maffra Road was planned with knowledge of the development of land to the south of the subject site. Therefore, it is only the additional traffic generated by the subject site that needs to be assessed.

The main movements will be the right turn out of Marshalls Road into Traralgon-Maffra Road, and the left turn from Traralgon-Maffra Road. Based on the peak hour volumes shown in **Figure 11**, it is anticipated that there would be up to 195 right turn out

movements (AM peak) and up to 146 left turn in movements (PM peak), equating to an average of approximately 3 movements per minute and 2-3 movements per minute, respectively. It is clear that the signalised intersection of Marshalls Road and Traralgon-Maffra Road will be able to accommodate the additional traffic generated by the proposed development area.

## 5.4 TRAFFIC IMPACT

On the basis of the above traffic assessment, the traffic movements anticipated to be generated by the proposal would be readily accommodated on the proposed road network without any significant adverse impacts.

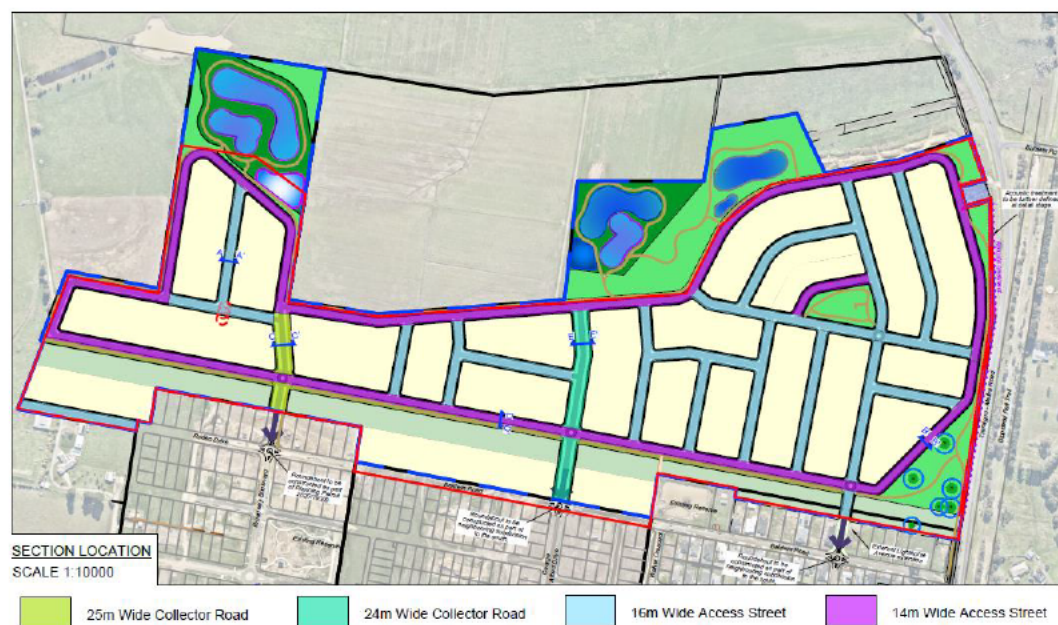
# 6 INTERNAL ROAD NETWORK

## 6.1 FUNCTIONAL CLASSIFICATIONS

Having regard to the configuration of the internal road network, the surrounding roads, the location of the town centre in relation to the subject land and Table 2 of Section 12.3.2 (Road/Street Characteristics and Road Reserve Widths) of the Infrastructure Design Manual (IDM), the recommended road hierarchy is shown in **Figure 13**.

The western and central north-south roads connecting to Marshall Road would function as Collector Streets – Level 1, while all other roads would function as Access Streets.

In accordance with the IDM, an Access Street carries an indicative traffic volume of 0 – 2,500 trips/day. A collector street carries an indicative traffic volume of 2,500 – 6,000 trips/day.



**FIGURE 13: INTERNAL ROAD CLASSIFICATION**

## 6.2 STREET DESIGN

The road reserve widths and cross sections would be designed in accordance with the requirements of the IDM and according to the practice of Latrobe City Council.

The majority of the access streets are proposed to have a road reserve width of 16 metres, which would provide a 7.3-metre-wide carriageway with 1.5-metre-wide footpaths and 2.5-metre-wide nature strips on both sides.

Access streets adjacent to reserves are proposed to have a road reserve width of 14 metres, which would provide a 7.3-metre-wide carriageway with a 1.5-metre-wide footpath and 2.5-metre-wide nature strip on the developed side. A 2.5-metre-wide shared path would be provided within the reserve on the opposite side.

The connector streets are proposed to have road reserve widths of 24 or 25 metres to match into the existing streets to the south. The 24-metre road reserve would provide a 7.3-metre-wide carriageway with 2.3-metre-wide parking lanes, 1.5-metre-wide footpaths and 4.2-metre-wide nature strips on both sides.

The 25-metre road reserve would provide a 7.0-metre-wide carriageway with 2.3-metre-wide parking lanes on both sides, a 1.5-metre-wide footpath on one side and a 2.5-metre-wide shared path on the other side.

The proposed cross-sections are shown in the cross-section plan in **Appendix A**.

## 6.3 ROAD CONNECTIONS TO MARSHALLS ROAD

As discussed previously, there will ultimately be three road connections through the land to the south to Marshalls Road, as indicated in **Figure 14**.

The western connection continues as Broadway Boulevard/Park Lane, the middle connection continues into Portabello Road, and the eastern connection continues as Lighthorse Avenue. Aerial imagery from May 2024 indicates that these roads already connect to Marshall Road and are currently being extended further north towards the subject land.

For intersection control, roundabouts will be constructed at the intersections of these roads with Baldwin Road as required.

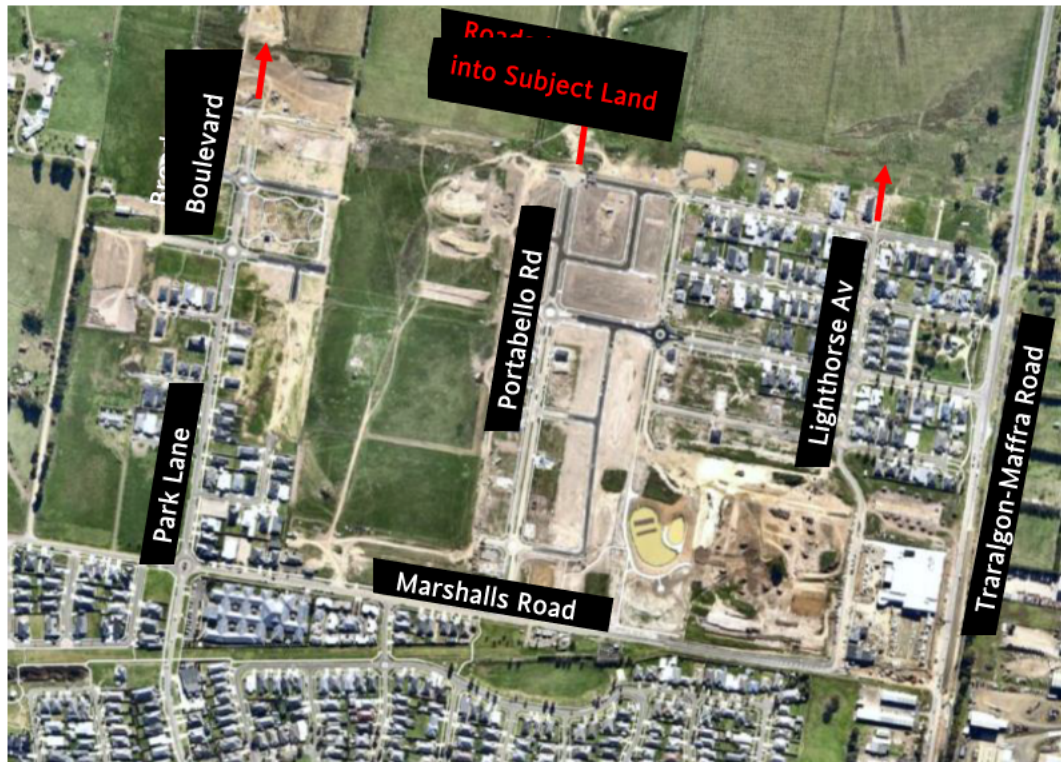


FIGURE 14: ROAD CONNECTIONS TO MARSHALLS ROAD

#### 6.4 PEDESTRIAN & CYCLIST PROVISION

The cross-sections would provide pedestrian footpaths as required in the IDM. Shared paths will be provided along the main east-west street, the western north-south connector road, and streets fronting reserves.

On other streets cyclists would use the road pavement. Indicative locations for the shared paths are shown as brown lines on the Concept Layout plan in **Appendix A**.

It is noted on the Concept Layout plan that it is proposed to provide a connection from the shared path along the eastern site boundary to the Gippsland Rail Trail which runs along the eastern side of Traralgon-Maffra Road.

#### 6.5 PUBLIC TRANSPORT

There is no requirement for any of the internal streets within the proposed subdivision to be 'bus capable'.

#### 6.6 LOCAL AREA TRAFFIC MANAGEMENT

It is intended that the intersections within the subdivision will typically be T-intersections. This is appropriate from a road safety perspective. In accordance with Clause 56.06-7 of the Planning Scheme, a minimum 3m x 3m corner splay should be provided at intersections of streets within the subdivision.

Roundabouts will be located at any cross-intersections to mitigate any safety or operational issues. This is an appropriate safety treatment to reduce vehicle speeds and the angle of conflict at the intersection.

The street blocks are generally between 120 – 240 metres in length and between 60 – 120 metres in width, which is in accordance with the requirements of Clause 56.06-7 to facilitate pedestrian movement and control traffic speed.

The IDM states that slowing devices (i.e. speed humps) are optimally located at spacings of 100-150m. It is recommended that the location of any slowing devices is determined at the detailed design stage in consultation with Council.

## 6.7 EMERGENCY AND SERVICE VEHICLE ACCESS

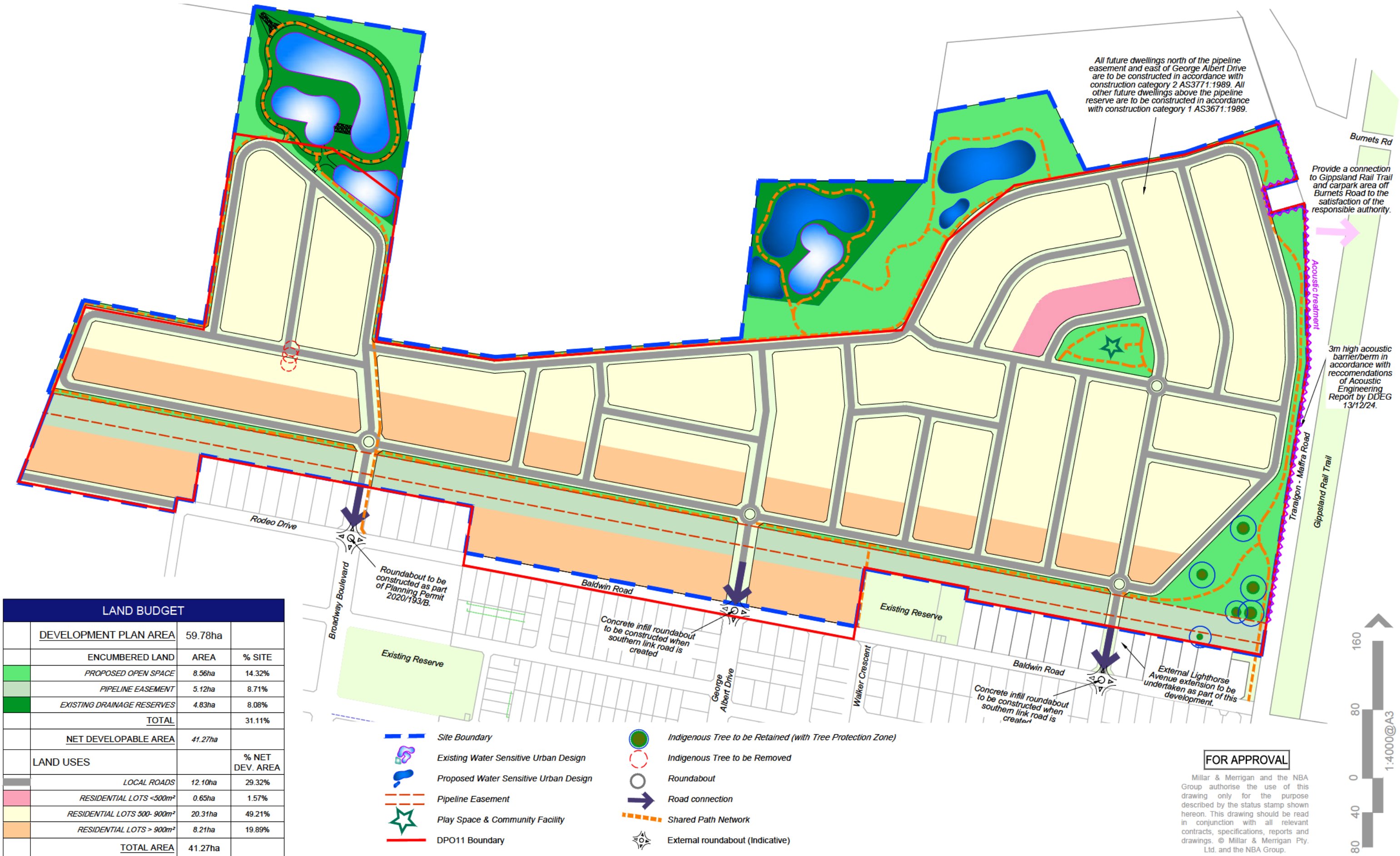
Country Fire Authority (CFA) requirements for fire truck access are specified in the document *Vehicle Access and Water Supply Requirements in Residential Developments* (2022). The requirements outlined in this guide would be met with the IDM road cross-sections. This also ensures appropriate access for emergency and service vehicles.

## 7 CONCLUSION

Based on the investigations made during the preparation of this report it is concluded that the traffic impacts of the proposed development plan will be adequately catered for and will not cause any adverse impact to the surrounding road network.

# APPENDIX A

## PROPOSED DEVELOPMENT PLAN



LAND BUDGET			
DEVELOPMENT PLAN AREA	59.78ha		
ENCUMBERED LAND	AREA	% SITE	
PROPOSED OPEN SPACE	8.56ha	14.32%	
PIPELINE EASEMENT	5.12ha	8.71%	
EXISTING DRAINAGE RESERVES	4.83ha	8.08%	
TOTAL		31.11%	
NET DEVELOPABLE AREA	41.27ha		
LAND USES		% NET DEV. AREA	
LOCAL ROADS	12.10ha	29.32%	
RESIDENTIAL LOTS <500m <sup>2</sup>	0.65ha	1.57%	
RESIDENTIAL LOTS 500- 900m <sup>2</sup>	20.31ha	49.21%	
RESIDENTIAL LOTS > 900m <sup>2</sup>	8.21ha	19.89%	
TOTAL AREA	41.27ha		

# BALDWIN ROAD DEVELOPMENT PLAN

Traralgon-Maffra Road, Traralgon  
 Latrobe City Council  
 25950 DP1\_V2  
 (February 2025)

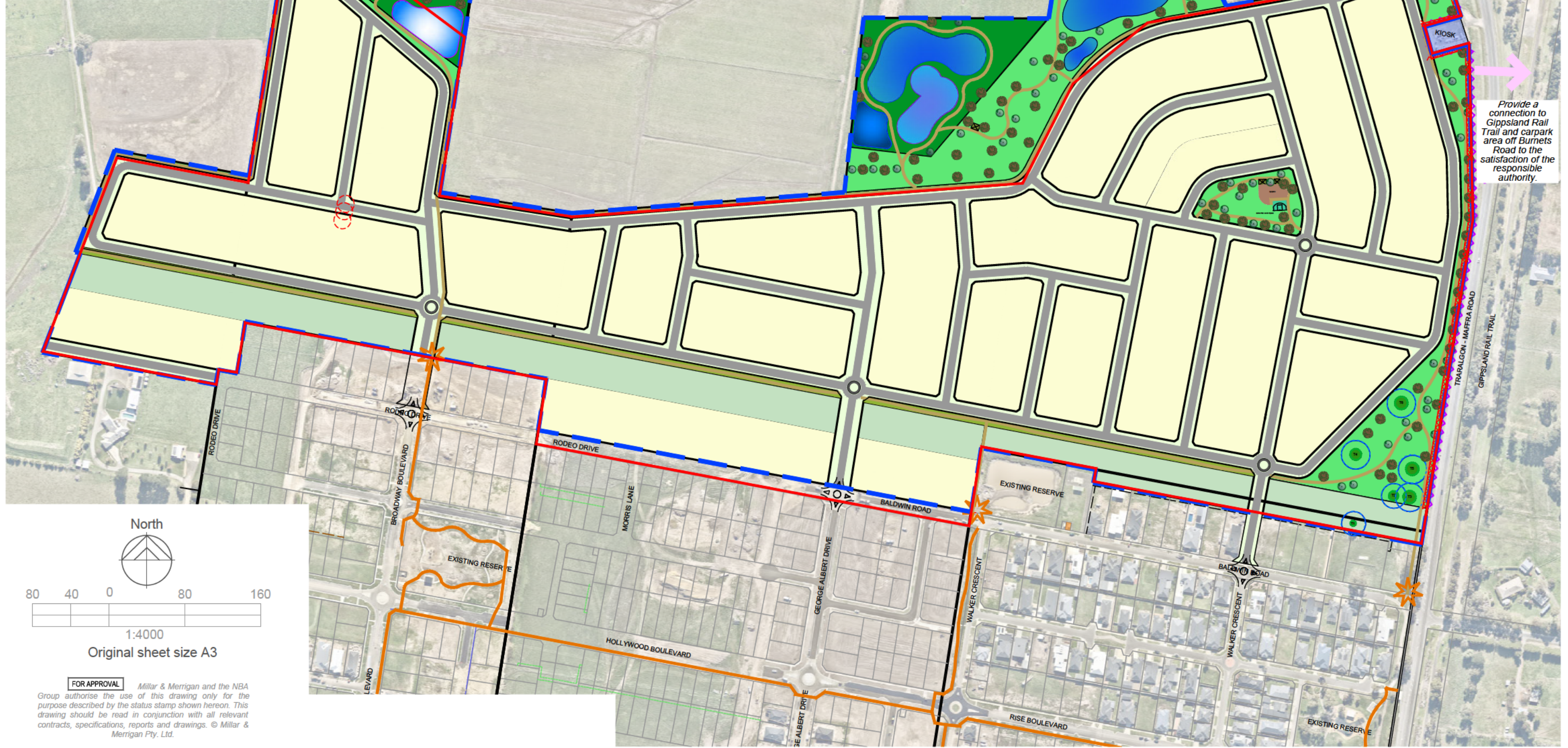
Millar & Merrigan Pty Ltd ACN 005 541 668  
 Metro 2/126 Merrindale Drive, Croydon 3136  
 Regional 156 Commercial Road, Morwell 3840  
 Mail PO Box 247 Croydon, Victoria 3136  
 T (03) 8720 9500 F (03) 8720 9501  
 admin@millarmerrigan.com.au  
 millarmerrigan.com.au

NBA Group Pty Ltd ABN 194 748 327 43  
 Morwell 156 Commercial Road, 3840  
 Sale 10 Dawson Street, 3850  
 nbagroup.com.au

**Legend**

- Proposed shared path
- Shared path on neighbouring property
- Shared path connection
- Site boundary
- DPO11 boundary

NOTE: This plan is subject to the approval of various statutory authorities



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NBA group

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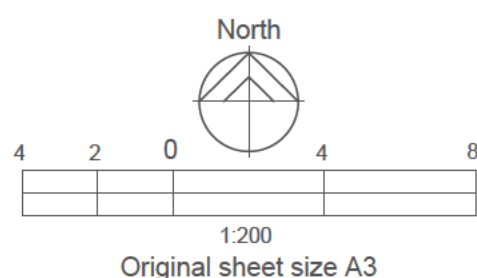
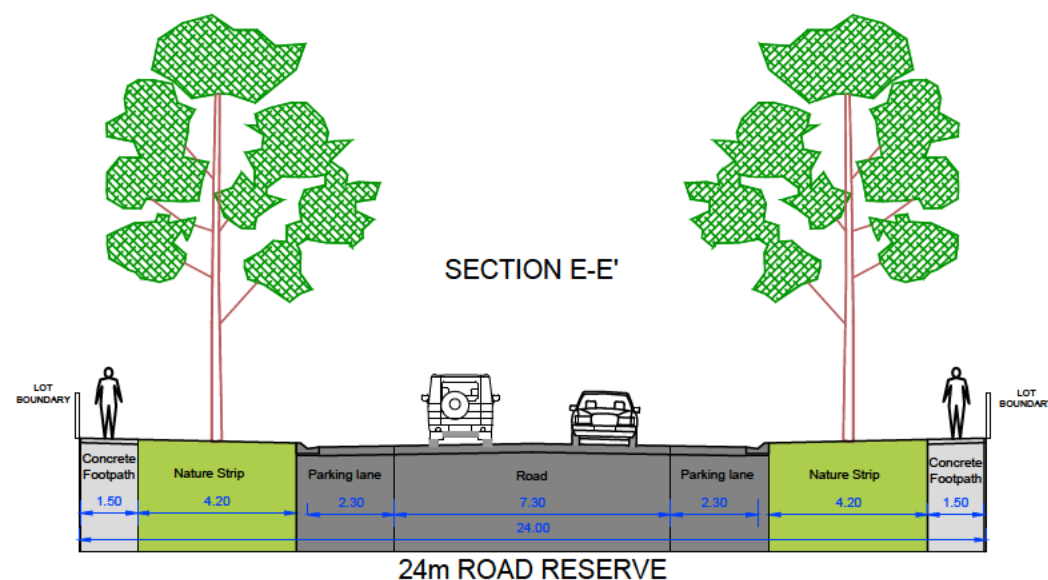
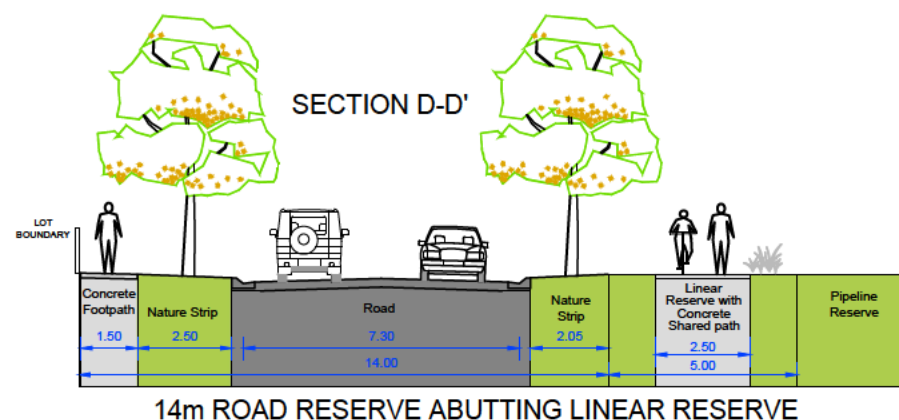
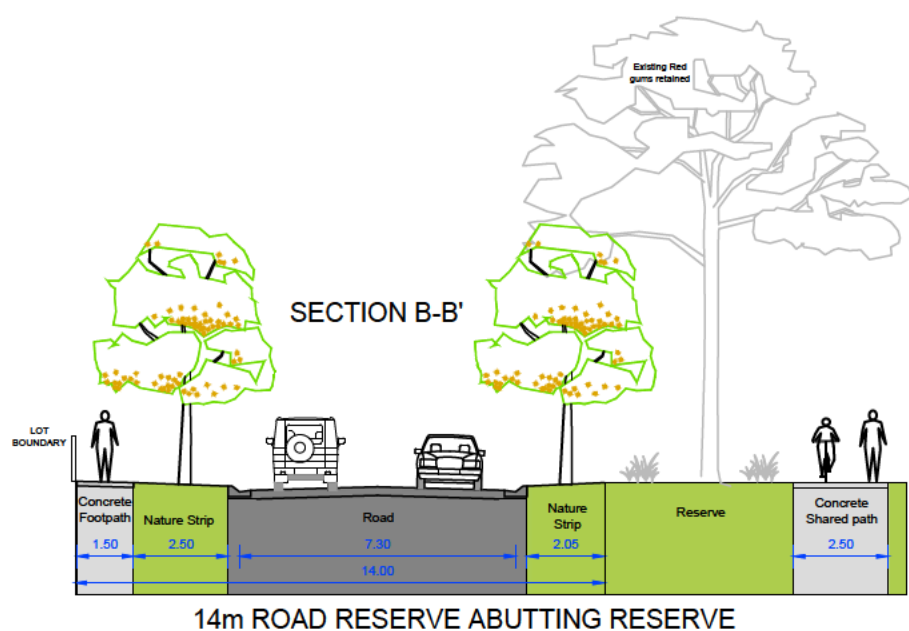
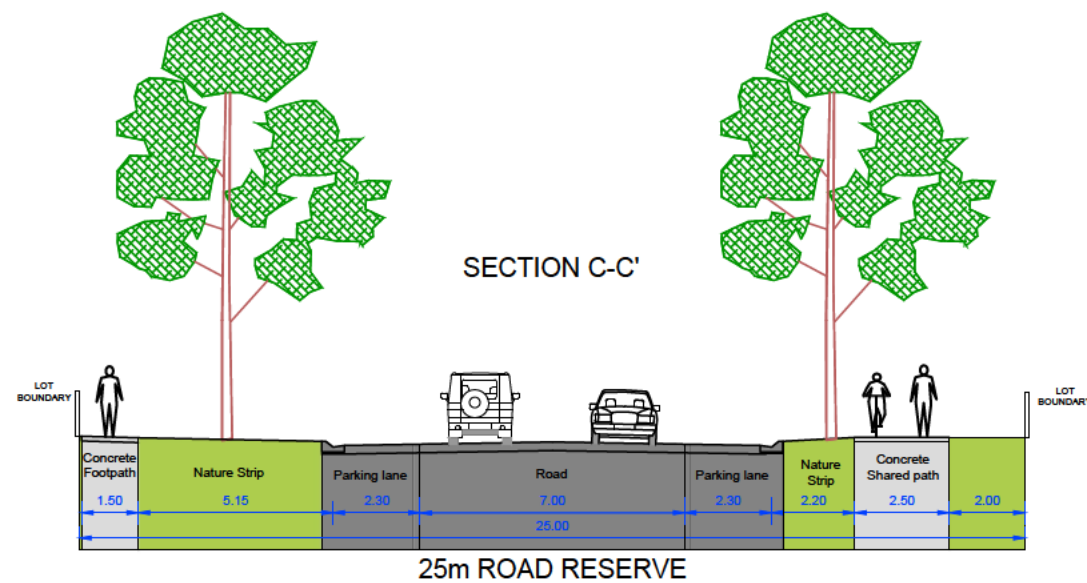
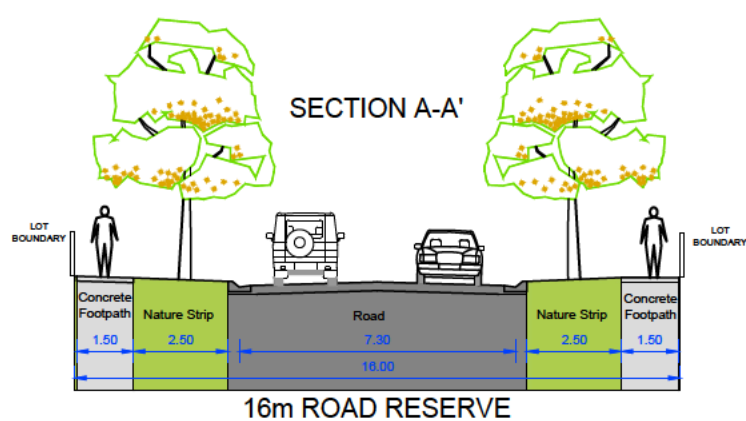
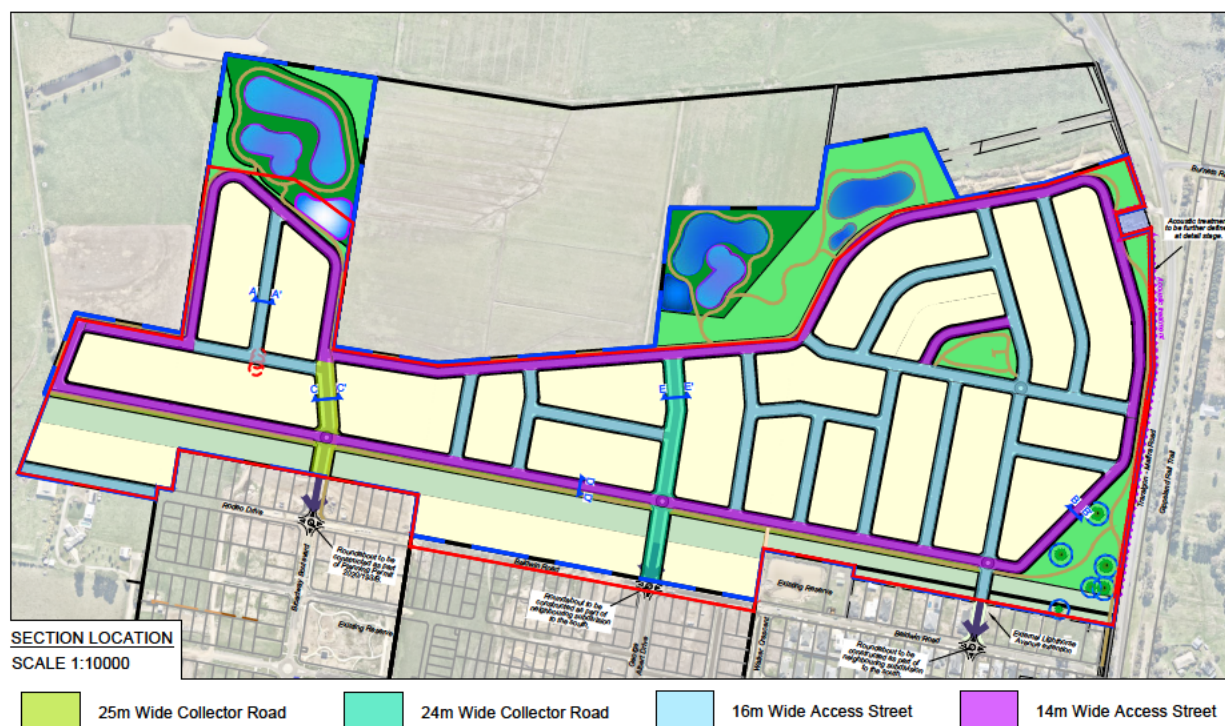
# MOVEMENT PLAN

Traralgon-Maffra Road, Traralgon  
Latrobe City Council  
25950 DP3  
Version 2  
Date: February 2025

**Millar & Merrigan Pty Ltd** ACN 005 541 668  
**Metro** 2/126 Merrindale Drive, Croydon 3136  
**Regional** 156 Commercial Road, Morwell 3840  
**Mail** PO Box 247 Croydon, Victoria 3136  
**T** (03) 8720 9500  
admin@millarmerrigan.com.au  
millarmerrigan.com.au

**NBA Group Pty Ltd** ABN 194 748 327 43  
**Morwell** 156 Commercial Road, 3840  
**Sale** 6-8 Wellington Park Way, 3850

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Dimensions and streetscapes shown hereon are indicative for representative purposes and are subject to detailed engineering design.

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# STREETSCAPE CROSS SECTIONS

Traralgon-Maffra Road, Traralgon  
Latrobe City Council  
25950 DP2  
Version 2  
Date: February 2025

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**Metro** 2/126 Merrindale Drive, Croydon 3136  
**Regional** 156 Commercial Road, Morwell 3840  
**Mail** PO Box 247 Croydon, Victoria 3136  
**T** (03) 8720 9500  
admin@millarmerrigan.com.au  
millarmerrigan.com.au

**NBA Group Pty Ltd** ABN 194 748 327 43  
**Morwell** 156 Commercial Road, 3840  
**Sale** 6-8 Wellington Park Way, 3850  
**nbagroup.com.au**